

Online TBL

Introduction

TBL usually involves students and educators meeting in the same place at the same time. However, as technology has evolved, TBL practitioners have experimented with different ways of facilitating these stages outside of the physical classroom (Clark et al., 2018).

Such innovation has been necessitated by working with distance learning students (e.g. Palsole and Awalt, 2008) but also became more popular during the recent Covid-19 pandemic (e.g. Cross et al., 2020).

Some authors (e.g. Gomez and Passerini, 2010) seek to use online technology to "continue the conversations" that occur beyond class time. Others have sought ways to make the most of live class time by running some TBL activities between classes. Here we share five tips to consider when planning for Online TBL. Further reading and links are also provided.

Tip 1: Can Synchronous Online TBL provide a solution?

This can be a solution when physically meeting up is not possible (see Goh et al., 2020 as an example). Synchronous Online TBL requires a videoconferencing tool with features such as a breakout rooms, whiteboard and the ability for students and educators to be able to share screens. These can then be used in tandem with the tools mentioned in our Readiness Assurance Test resources and our Application Exercise resources.

Two videoconferencing tools which have the requisite features are:

- **Zoom** - Enables students to share screens and whiteboards in breakout rooms (Wilson, Vieira and Rinaldi, 2020)
- **Microsoft Teams** - Also enables students to screenshare and added the breakout room function in 2020 (Griffith and Jansen, 2021).

Tip 2: Asynchronous Online TBL may be suitable for some elements

Asynchronous Online TBL (see Palsole and Awalt, 2008; Clarke and Leonard, nd) involves students and educators conducting the various steps of Team Based Learning outside of class. Fully asynchronous TBL would involve students:

- Completing timed (or untimed) iRATs within a specified time period (e.g. 2 days).
- Completing tRATs within a specified time period (e.g. 3 days). Students discuss their answers from the IRAT using discussion forums within a Learning Management System or another tools e.g. MS Teams. One member responds using an online quiz tool.
- Engaging with a clarification video created by the educator. This can be coupled with a whole class discussion forum to discuss the clarification.
- Writing and forwarding appeals via email or similar
- Completing application exercises via file uploads or discussion forums (O'Hanlon, 2021) and Wikis within Learning Management Systems e.g. Moodle.
- Engaging in whole class discussion using tools which enable staggered asynchronous discussion e.g. discussion forums in LMS systems, MS Teams.

A fully asynchronous TBL unit is rare but practitioners can use some of the steps above to complement in-class or synchronous online activities (e.g. (Wilson, Vieira and Rinaldi, 2020). Tools to support asynchronous online TBL include:

- **Moodle** – Moodle has tools such as Wikis and Discussion Forums which can be set to be accessible to teams and educator only
- **LAMS Learning Activity Management System** – LAMS has the advantage of being a space for all asynchronous activities in TBL. Students can indicate confidence levels and leave comments to support asynchronous discussion during tRATs

Tip 3: Go Blended: Mix it up

Blended TBL involves mixing more than one mode of TBL.

- iRATs conducted before class, all other activities conducted within class. Due to the challenge of coordinating team members, team activities can be more challenging to run asynchronously than individual activities (Clarke et al., 2018).
- Application Exercises having "out of class" elements. Students collaborate over time on an exercise. Can provide time for reflection and research. See Goh et al. (2020).
- tRATs conducted by teams of students outside of class. Using forums or their own means to share answers before one person inputs on behalf of the team. See Palsole and Awalt (2008).
- Whole class discussion continues on a [discussion forum](#) after class.

Tip 4: Consider bandwidth

When we seek to offer Online TBL we need to be cognizant not only of the availability of the requisite student devices but also bandwidth. Where there is poor bandwidth, asynchronous TBL (with the use of forums) as opposed to fully live synchronous TBL may be merited. See Lobue (2020) for more on what activities may be more suited in such circumstances.

Tip 5: The right tools for the job?

Moving from one platform to another for different parts of TBL may be difficult and confusing for students. Keeping things simple and intuitive helps reduce unnecessary cognitive load during the learning process.

Consider the platforms you are planning to use for the various stages of TBL. Can they be consolidated onto one platform? Can, for example, the pre reading, the readiness assurance tests, and the application exercises be primarily accessible on the one platform?

Learning Management Systems like Moodle and tools which are designed for TBL (LAMS) have features for multiple elements of TBL. This means that students may not have to switch platforms regularly.

Further Reading

- Clark, M. al. (2018) ["Off to On: Best Practices for Online Team-Based Learning"](#) (2018). Center for Excellence in Learning and Teaching Publications.

This paper is a must for any educator considering incorporating Online TBL in their practice. It outlines a series of "best practices" for facilitating online TBL.

- Goh, S. H., Di Gangi, P. M., & Gunnells, K. (2020). Teaching Tip: Applying Team-Based Learning in Online Introductory Information Systems Courses. Journal of Information Systems Education, 31(1), 1-11.

This paper provides a concrete example of a course being offered within an online environment, with reflections and recommendations.

Useful Links

- [Online TBL course by Michelle Clark and Bruce Leonard](#)

This excellent resource is an online course you can complete at your own pace. It focuses on both synchronous and asynchronous TBL with lots of practical tips on how to make these work well

- [Brian Dwyer Blogpost on Synchronous Online TBL](#)

This blogpost by Brian Dwyer of Intedashboard is full of excellent practical advice on running synchronous online TBL.

- [Using LAMS for TBL](#) - LAMS is a system with many of the tools we require for TBL (quizzing, forums, wikis) in the one spot. This website from LAMS Foundation showcases how it can be used to support TBL inside and outside of the physical classroom

- [Jim Sibley's Learn TBL Website](#) - A treasure trove for anyone wanting to learn about Team Based Learning. His section on [Online TBL](#) is filled with links, tools and further reading on the topic

- [Step by Step guide for Breakout Rooms in Zoom](#) - How to set them up and transition to the main room

